



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,190	08/27/2003	Yusuke Yasukawa	1080.1128	3483

21171 7590 03/30/2007
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

PATEL, HEMANT SHANTILAL

ART UNIT	PAPER NUMBER
----------	--------------

2614

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/648,190

Applicant(s)

YASUKAWA ET AL.

Examiner

Hemant Patel

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Applicant Response dated January 18, 2007 to an Office Action dated October 18, 2006 is entered. Claims 1, 3-10 are pending in this application.

Response to Arguments

2. Applicant's arguments filed January 18, 2007 have been fully considered but they are not persuasive.

3. Regarding claim 1, the Applicant argues (Remarks, pg. 5, ll. 28-30) "But the designation modes of claim 1 specify how a user pushes a button. (See page 14, lines 2 and 3 of the application)." In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., user push button specifying designation modes) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Response to Amendment

4. Applicant's arguments with respect to claims 1, 3-10 have been considered but are moot in view of the new ground(s) of rejection. The rejections are necessitated due to claim amendments and addition of new claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 3-5, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner (US Patent No. 6,703,930 B2), and further in view of Bloomfield (US Patent No. 5,446,445).

Regarding claim 1, Skinner teaches of a mechanism, comprising:

a communication section which wirelessly connects to a communication line (Fig. 1, items 104, 112, 114; col. 5, ll. 63-col. 6, ll. 24);

a detection section (Fig. 1, item 104), which detects a plurality of user requests provided by a user (col. 7, ll. 15-29, 62-67; controller detecting requests input by the user, the requests being to monitor certain events and report corresponding messages);

a storing section which stores telephone numbers, wherein each of the telephone number is associated with a respective emergency reporting item comprising a priority sequence, a designation mode of one of the user requests and an associated message (col. 7, ll. 15-29; col. 7, ll. 62-col. 9, ll. 8; selective routing of messages to predetermined communications devices indicating association of telephone number and respective message, each message having an associated priority and a mode designated by the user to be used to indicate the occurrence of the requested event to the user); and

a telephone control section which causes the communication section to dial the telephone number stored in the storing section in response to the detection section detecting the respective request mode of one of the user requests (col. 7, ll. 62-col. 8, ll. 67; communicating user configured alerting message to the specific communication device i.e. dialing a cellular telephone number in response to the detection of user specified request event in any sensory mode and delivers the respective message in user designated mode i.e. visual, audible or mechanical), and then delivers the associated message stored in the storing section as a voice message to a receiver when the receiver responds (col. 7, ll. 41-44; col. 9, ll. 1-8).

Skinner does not teach of such a system in a free moving robot.

However, in the same field of endeavor, Bloomfield teaches of a free moving robot performing surveillance monitoring and reporting abnormal conditions through

wireless network to the remote user (Fig. 1; col. 4, ll. 31-45; col. 6, ll. 55-col. 7, ll. 22; col. 8, ll. 27-col. 9, ll. 5; col. 22, ll. 56-col. 23, ll. 26).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Skinner to be included as a surveillance mechanism in the free moving robot as taught by Bloomfield in order to provide "a rapid mobile detection system having a fire alarm, burglar alarm, gas leakage alarm, sound detecting alarm and the like, which needs no wiring work in and out of the house, and what's more, which is inexpensive to install as well as inexpensive to manufacture" (Bloomfield, col. 1, ll. 65-col. 2, ll. 2).

Regarding claim 3, Bloomfield teaches of robotic system comprising a microphone and a speaker, and wherein the telephone control section causes, after delivering the associated message to the receiver, the communication section to be in a state of communication using the microphone and the speaker (col. 21, ll. 1-col. 22, ll. 67).

Regarding claim 4, Skinner teaches an e-mail transmission function, wherein the storing section further stores an e-mail address and a message associated with the e-mail (col. 7, ll. 62-67; col. 8, ll. 20-39; messages configure for email),

wherein the detection section detects a plurality of modes of requests (col. 7, ll. 15-29, 62-67; controller detecting requests input by the user, the requests being to monitor certain events and report associated messages), and

wherein the telephone control section transmits, according to a mode of request detected by the detection section, the message associated with the e-mail address stored in the storing section (col. 8, ll. 1-67; routing and delivering messages with email).

Regarding claim 5, Skinner teaches of the telephone control section that dials a telephone number according to a mode of request detected by the detection section when the detected mode of request is a telephone mode (col. 8, ll. 1-67; routing and delivering messages by a mode of pager or a cellular phone as requested by the user to the controller).

Skinner is silent on sending an email message as a default backup if the receiver does not respond to a dialed call to deliver the message.

However, Skinner teaches of sending email alert messages for low priority messages (col. 8, ll. 1-67).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Skinner to use this low priority email messaging in case the user does not respond to dialed call for the high priority message (col. 8, ll. 54-57; user not to be disturbed or bystanders in the vicinity) so that the message is at least recorded for later retrieval by the user to be read at his or her earliest convenience (col. 8, ll. 30-32, 60-64).

Regarding claim 7, Skinner teaches of telephone control section delivering emergency message based on priority sequence associated with the designation mode

of one of the user requests (col. 7, ll. 62-col. 10, ll. 8, delivering user configured message based on user specified associated priority and mode).

Regarding claim 8, Skinner teaches of using interface keyboard for user input (col. 4, ll. 5-9) for configuring messages with associated requests, priority and designated modes (col. 7, ll. 62-col. 8, ll. 67).

Regarding claim 9, Skinner teaches of delivering recorded or synthesized human voice messages (col. 7, ll. 41-44). Bloomfield also teaches of synthesized message delivered by telephone control section (col. 23, ll. 18-25).

Regarding claim 10, Skinner teaches of a method to detect a user emergency request (col. 7, ll. 62-67; user specified requests) and report an emergency in response (col. 7, ll. 62-col. 8, ll. 67; sending associated messages), the method comprising:

detecting from among any of a plurality of emergency requests stored in a memory in a priority sequence with an associated designation mode and telephone number, an emergency request (col. 7, ll. 15-col. 8, ll. 67); and

dialing a telephone number associated with the emergency request in response to the respective designation mode of the detected emergency request, communicating wirelessly (col. 8, ll. 1-col. 9, ll. 8).

Skinner does not teach of this method in a free moving robot.

However, in the same field of endeavor, Bloomfield teaches of a free moving robot performing surveillance monitoring and reporting abnormal conditions through wireless network to the remote user (Fig. 1; col. 4, ll. 31-45; col. 6, ll. 55-col. 7, ll. 22; col. 8, ll. 27-col. 9, ll. 5; col. 22, ll. 56-col. 23, ll. 26).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Skinner to be included as a method in the free moving robot system as taught by Bloomfield in order to provide "a rapid mobile detection system having a fire alarm, burglar alarm, gas leakage alarm, sound detecting alarm and the like, which needs no wiring work in and out of the house, and what's more, which is inexpensive to install as well as inexpensive to manufacture" (Bloomfield, col. 1, ll. 65-col. 2, ll. 2).

8. Claims 1, 3-5, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakita (International Publication No. WO 99/67067), and further in view of Skinner.

Regarding claim 1, Kawakita teaches of a robot including a moving mechanism for causing the robot to move freely, comprising:

a communication section (Fig. 2, item 25) which wirelessly (paragraph 0076, cordless telephone, paragraph 0211, mobile phone) connects to a communication line;

a detection section (Fig. 2, item 20, controller), which detects a plurality of user requests provided by a user (paragraph 0078, 0087-0088, request for visually express different words);

a storing section (Fig. 2, item 20, paragraph 0043, memory in controller) which stores a message (paragraph 0221, response message) and associated telephone number (paragraph 0149, previously registered family or hospital); and

a telephone control section (Fig. 2, item 20, controller) which causes the communication section (Fig. 2, item 25) to dial the telephone number stored in the storing section (paragraph 0149, previously registered family or hospital) in response to the detection section detecting the request (paragraph 0149, detection of absence of reaction) provided by the user, and then delivers the message stored in the storing section (paragraph 0221, response message) as a voice message to a receiver when the receiver responds.

Kawakita does not teach of a plurality of messages respectively associated with the plurality of telephone numbers and the telephone control section dialing a telephone number according to a mode of request detected by the detection section, and delivering a message associated with the dialed telephone number.

However, in the same field of endeavor, Skinner teaches of a communication section which wirelessly connects to a communication line (Fig. 1, items 104, 112, 114; col. 5, ll. 63-col. 6, ll. 24);

a detection section (Fig. 1, item 104), which detects a plurality of user requests provided by a user (col. 7, ll. 15-29, 62-67; controller detecting requests input by the user, the requests being to monitor certain events and report corresponding messages);

a storing section which stores telephone numbers, wherein each of the telephone number is associated with a respective emergency reporting item comprising a priority sequence, a designation mode of one of the user requests and an associated message (col. 7, ll. 15-29; col. 7, ll. 62-col. 9, ll. 8; selective routing of messages to predetermined communications devices indicating association of telephone number and respective

message, each message having an associated priority and a mode designated by the user to be used to indicate the occurrence of the requested event to the user); and

a telephone control section which causes the communication section to dial the telephone number stored in the storing section in response to the detection section detecting the respective request mode of one of the user requests (col. 7, ll. 62-col. 8, ll. 67; communicating user configured alerting message to the specific communication device i.e. dialing a cellular telephone number in response to the detection of user specified request event in any sensory mode and delivers the respective message in user designated mode i.e. visual, audible or mechanical), and then delivers the associated message stored in the storing section as a voice message to a receiver when the receiver responds (col. 7, ll. 41-44; col. 9, ll. 1-8).

It would have been obvious to a person of ordinary skill in the art to modify a robot as taught by Kawakita to include a plurality of telephone numbers associated with respective user configured messages with their respective priority and user designated mode as taught by Skinner so that "Multiple outgoing exception messages may be forwarded to multiple communication devices in accordance with a user-specified message profile" (Skinner, col. 1, ll. 50-53) and "mode of the alerting message can be configured or selected in accordance with a physical impairment of the user" (Skinner, col. 9, ll. 1-3), and "a high priority message can be routed to a pager by way of a pager network, and also to a cellular telephone by way of a cellular telephone network" (Skinner, col. 9, ll. 16-18).

Regarding claim 3, Kawakita teaches of a robot, further comprising a microphone (Fig. 1, item 10) and a speaker (Fig. 1, item 11), and wherein the telephone control section causes, after delivering the message to the receiver (Paragraphs 0079 – 0082, transmitting sound and images), the communication section to be in a state of communication using the microphone and the speaker (Paragraphs 0084, staying in video telephone conversation). It would be obvious to keep this microphone and speaker in a state of communication after delivering the associated stored message (Paragraphs 0212, 0221) to receive user information.

Regarding claim 4, Skinner teaches an e-mail transmission function, wherein the storing section further stores an e-mail address and a message associated with the e-mail (col. 7, ll. 62-67; col. 8, ll. 20-39, messages with email), wherein the detection section detects a plurality of modes of requests (col. 7, ll. 15-29, 62-67; controller detecting requests input by the user, the requests being to monitor certain events and report corresponding messages), and wherein the telephone control section transmits, according to a mode of request detected by the detection section, the message associated with the e-mail address stored in the storing section (col. 8, ll. 1-67, routing and delivering messages with email).

Regarding claim 5, Skinner teaches of the telephone control section that dials a telephone number according to a mode of request detected by the detection section when the detected mode of request is a telephone mode (col. 8, ll. 1-67; routing and

delivering messages by a mode of pager or a cellular phone as requested by the user to the controller).

Skinner is silent on sending an email message as a default backup if the receiver does not respond to a dialed call to deliver the message.

However, Skinner teaches of sending email alert messages for low priority messages (col. 8, ll. 1-67).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Skinner to use this low priority email messaging in case the user does not respond to dialed call for the high priority message (col. 8, ll. 54-57; user not to be disturbed or bystanders in the vicinity) so that the message is at least recorded for later retrieval by the user to be read at his or her earliest convenience (col. 8, ll. 30-32, 60-64).

Regarding claim 7, Skinner teaches of telephone control section delivering emergency message based to priority sequence associated with the designation mode of one of the user requests (col. 7, ll. 62-col. 10, ll. 8, delivering user configured message based on user specified priority and mode).

Regarding claim 8, Skinner teaches of using interface keyboard for user input (col. 4, ll. 5-9) for configuring messages with associated requests, priority and designated modes (col. 7, ll. 62-col. 8, ll. 67).

Regarding claim 9, Skinner teaches of delivering recorded or synthesized human voice messages (col. 7, ll. 41-44). Kawakita also teaches of synthesized message delivered by telephone control section (paragraph 0221, response message).

Regarding claim 10, Kawakita teaches of a method of having a free moving robot to detect a user emergency request (paragraph 0078, 0087-0088, request to express different words; paragraph 0202, requests to monitor different conditions of the house) and report an emergency in response (paragraphs 0132, 0202, 0205, 0221, response message), the method comprising:

detecting from among any of a plurality of emergency requests stored in a memory with an associated telephone number, an emergency request (paragraph 0202, detect particular condition of the house, telephone numbers to call user, police, fire department); and

dialing a telephone number associated with the emergency request in response to the detected emergency request, communicating wirelessly (paragraph 0202, 0205; calling the user, fire, police, hospital).

Kawakita does not teach of a plurality of requests in a priority sequence associated with a designation mode and telephone number and the telephone control section dialing a telephone number according to a designated mode of request associated with the dialed telephone number.

However, in the same field of surveillance, Skinner teaches of a method to detect a user emergency request (col. 7, ll. 62-67; user specified requests) and report an emergency in response (col. 7, ll. 62-col. 8, ll. 67; sending associated messages), the method comprising:

detecting from among any of a plurality of emergency requests stored in a memory in a priority sequence with an associated designation mode and telephone number, an emergency request (col. 7, ll. 15-col. 8, ll. 67); and

dialing a telephone number associated with the emergency request in response to the respective designation mode of the detected emergency request, communicating wirelessly (col. 8, ll. 1-col. 9, ll. 8).

It would have been obvious to a person of ordinary skill in the art to modify a robot as taught by Kawakita to include a plurality of telephone numbers associated with respective user configured requests and corresponding messages with their respective priority and user designated mode as taught by Skinner so that "Multiple outgoing exception messages may be forwarded to multiple communication devices in accordance with a user-specified message profile" (Skinner, col. 1, ll. 50-53) and "mode of the alerting message can be configured or selected in accordance with a physical impairment of the user" (Skinner, col. 9, ll. 1-3), and "a high priority message can be routed to a pager by way of a pager network, and also to a cellular telephone by way of a cellular telephone network" (Skinner, col. 9, ll. 16-18).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakita and Skinner as applied to claim 1 above, and further in view of Kataoka (US Patent Application Publication No. 2002/0181723 A1).

Regarding claim 6, Kawakita teaches of a robot, further comprising:
a microphone (Fig. 1, item 10);

a voice recognition section (Paragraphs 0087-0088, recognize speech) recognizing requests (Paragraph 0212); and

a movement control section (Fig. 2, item 20).

Kawakita and Skinner do not teach of recognizing that the robot is called based on a voice received by the microphone and moving the robot closer to a speaker who is calling the robot.

However, in the same field of endeavor, Kataoka teaches of a means for controlling a robot to move naturally upon its motion in voice recognition (paragraph 0017).

It would have been obvious to a person of ordinary skill in the art to modify a robot as taught by Kawakita and Skinner to include a means of moving a robot in response to voice recognition as taught by Kataoka in order to recognize sound of the person being monitored (Kawakita, Paragraph 0147) and move closer to that person (Kawakita, Paragraphs 0148-0149) upon recognition of request (Kawakita, Paragraph 0212).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemant Patel whose telephone number is 571-272-8620. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hemant Patel
Examiner
Art Unit 2614

HSP

HSP Patel



FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600